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HARVARD UNIVERSITY

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HARVARD SCHOOL OF
PUBLIC HEALTH

55 SHATTUCK STREET, BOSTON, MASS.

INCLUDING

COURSES OF INSTRUCTION
FOR 1934-35

PUBLISHED BY HARVARD UNIVERSITY

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PUBLICATION OFFICE, LEHMAN HALL, CAMBRIDGE, MASS.

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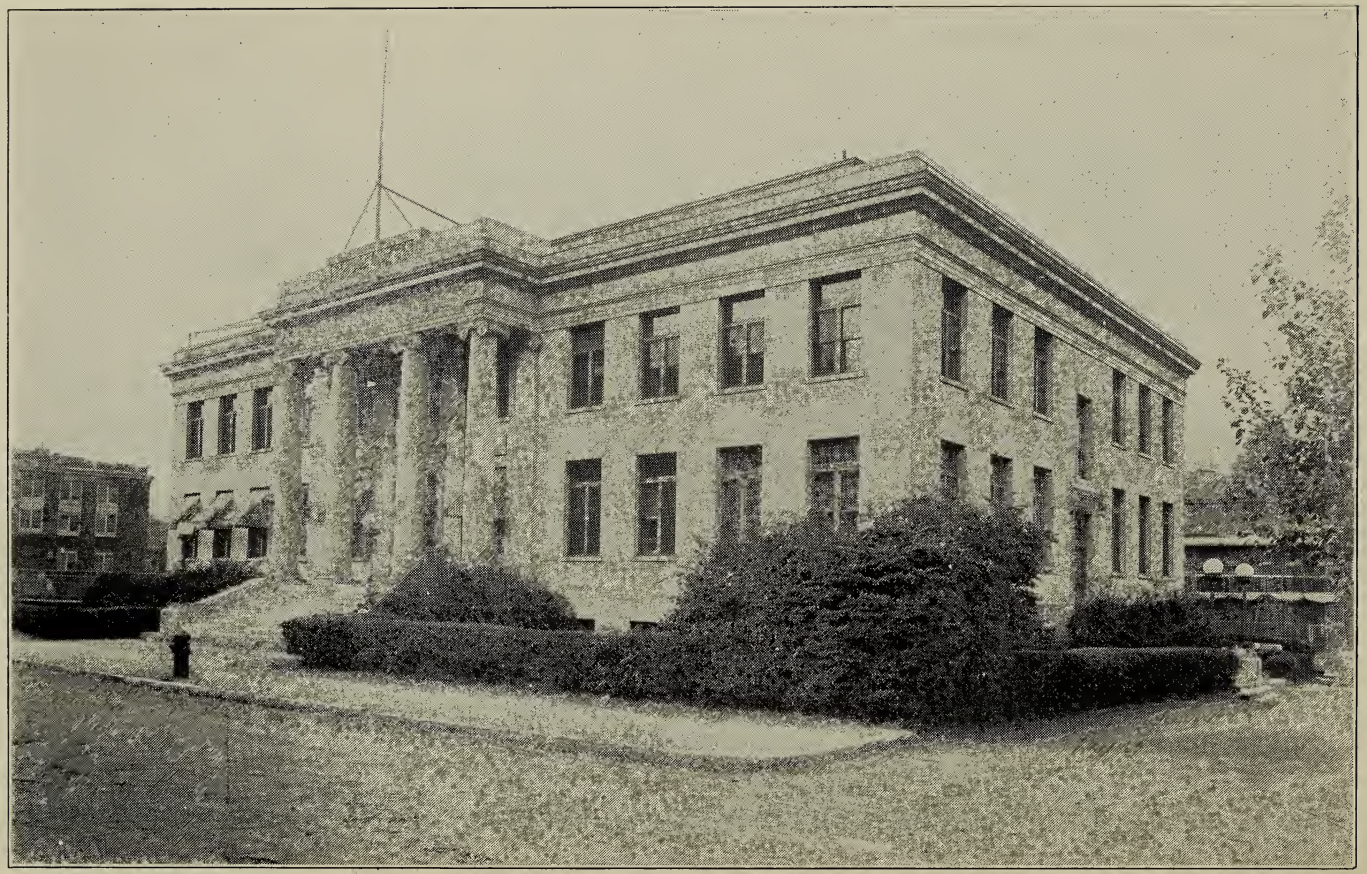

HARVARD SCHOOL OF PUBLIC HEALTH

ANNOUNCEMENT

OF THE

HARVARD SCHOOL OF PUBLIC HEALTH

55 SHATTUCK STREET, BOSTON, MASS.

OF

HARVARD UNIVERSITY

1934

PUBLISHED BY HARVARD UNIVERSITY

1934

JULY

Su	Mo	Tu	W	Th	Fr	Sa
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1935

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JULY

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SEPTEMBER

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DECEMBER

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22	23	24	*(25)*	26	27	28
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CALENDAR

1934

Sept. 21, Friday.	Registration of students.
Sept. 24, Monday.	ACADEMIC YEAR BEGINS. Payment of the first instalment of the tuition fee is required on this date.
Oct. 12, Friday.	Columbus Day: a holiday.
Nov. 12, Monday.	Armistice Day: a holiday.
Nov. 29, Thursday.	Thanksgiving Day: a holiday.
Nov. 30, Friday.	Payment of the second instalment of the tuition fee is required on or before this date.

RECESS FROM DEC. 23, 1934 TO JAN. 2, 1935, INCLUSIVE

1935

Jan. 1, Tuesday.	Last day for receiving theses for February degrees.
Jan. 30, Wednesday.	Payment of the third instalment of the tuition fee is required on or before this date.
Feb. 4, Monday.	SECOND HALF-YEAR BEGINS.
Feb. 22, Friday.	Washington's Birthday: a holiday.

RECESS FROM MARCH 31 TO APRIL 6, INCLUSIVE

April 19, Friday.	Patriots' Day: a holiday.
April 30, Tuesday.	Payment of the fourth instalment of the tuition fee is required on or before this date.
May 1, Wednesday.	Last day for receiving theses for June degrees.
May 30, Thursday.	Memorial Day: a holiday.
June 20, Thursday.	COMMENCEMENT.

SUMMER VACATION, FROM COMMENCEMENT TO SEPTEMBER 21, INCLUSIVE

In order to insure equal periods of time for the various courses, the following division of the academic year has been arbitrarily made:

Mon. Sept. 24–Sat. Oct. 20	OCTOBER
Mon. Oct. 22–Sat. Nov. 17	NOVEMBER
Mon. Nov. 19–Sat. Dec. 22	DECEMBER [1]
Thurs. Jan. 3–Sat. Feb. 2	JANUARY
Mon. Feb. 4–Sat. Mar. 2	FEBRUARY
Mon. Mar. 4–Sat. Mar. 30	MARCH
Mon. Apr. 1–Sat. May 4	APRIL [2]
Mon. May 6–Sat. June 1	MAY

[1] Christmas vacation from Dec. 23, 1934, to Jan. 2, 1935, inclusive.

[2] Spring recess from March 31 to April 6, 1935, inclusive.

THE PRESIDENT AND FELLOWS OF HARVARD COLLEGE

This Board is commonly known as the CORPORATION.

PRESIDENT

JAMES BRYANT CONANT, Ph.D., LL.D.
17 Quincy St., Cambridge

FELLOWS

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50 Federal St., Boston

CHARLES PELHAM CURTIS, JR., A.B., LL.B.
30 State St., Boston

ROGER IRVING LEE, A.B., M.D. 264 Beacon St., Boston

GRENVILLE CLARK, A.B., LL.B. 31 Nassau St., New York, N.Y.

TREASURER

HENRY LEE SHATTUCK, A.B., LL.B. 24 Milk St., Boston

FINANCIAL VICE-PRESIDENT

JOHN WILBER LOWES, A.B. 5 University Hall, Cambridge

DEPUTY TREASURER

HENRY AUSTIN WOOD, JR., A.B., M.B.A. 24 Milk St., Boston

SECRETARY TO THE CORPORATION

JEROME DAVIS GREENE, A.B., A.M.
5 University Hall, Cambridge

THE BOARD OF OVERSEERS

The PRESIDENT and the TREASURER of the University, *ex officio*, and the following persons by election: —

1935 *

CHARLES ALLERTON COOLIDGE, A.B., Art. D.
122 Ames Building, Boston

HUGH CABOT, A.B., M.D., LL.D.
The Mayo Clinic, Rochester, Minn.

HENRY JAMES, A.B., LL.B., LL.D.
36 W. 44th St., New York, N. Y.

WILLIAM TUDOR GARDINER, A.B., LL.D. Gardiner, Me.

HENRY STURGIS MORGAN, A.B. 23 Wall St., New York, N. Y.

1936

CHARLES FRANCIS ADAMS, A.B., LL.B., LL.D.
15 State St., Boston

LEARNED HAND, A.M., LL.B., LL.D.
Old Post Office Building, New York, N. Y.

SAMUEL SMITH DRURY, A.B., L.H.D., D.D., LITT.D.
St. Paul's School, Concord, N. H.

WALTER SHERMAN GIFFORD, A.B., LL.D., S.D.
195 Broadway, New York, N. Y.

ELIHU ROOT, JR., A.M., LL.B. 31 Nassau St., New York, N. Y.

1937

GEORGE RUSSELL AGASSIZ, A.B., President,
14 Ashburton Pl., Boston

ALLSTON BURR, A.M. 60 State St., Boston

DWIGHT PARKER ROBINSON, A.B., S.B. St. Davids, Pa.

FREDERICK WINSOR, A.B. Middlesex School, Concord, Mass.

WILLIAM PHILLIPS, A.M., LL.D.
Department of State, Washington, D. C.

* The term expires, in each case, on Commencement Day of the year indicated.

1938

MINOT SIMONS, A.M., D.D. 64 East 86th St., New York, N. Y.

DANIEL FISKE JONES, A.B., M.D. 195 Beacon St., Boston

ALBERT ARNOLD SPRAGUE, A.B.
1130 Lake Shore Drive, Chicago, Ill.

GEORGE WHITNEY, A.B. 23 Wall St., New York, N. Y.

FRANCIS PARKMAN, Ph.D. St. Mark's School, Southboro

1939

MARK ANTONY DE WOLFE HOWE, A.M., Litt.D.
16 Louisburg Sq., Boston

NATHAN HAYWARD, A.B., S.B.
308 Chestnut St., Philadelphia, Pa.

SAMUEL HUNTINGTON WOLCOTT, A.B.
State Street Trust Company, Boston

GASPAR GRISWOLD BACON, A.B., LL.B.
222 Prince St., Jamaica Plain

WALTER LIPPMANN, A.B., LL.B., Litt.D.
230 West 41st St., New York, N. Y.

SECRETARY OF THE BOARD OF OVERSEERS

WINTHROP HOWLAND WADE, A.M., LL.B.
50 Congress St., Boston

ADMINISTRATIVE OFFICERS

President: James B. Conant, Ph.D., LL.D.
Office, 5 University Hall, Cambridge.

Dean: David L. Edsall, A.B., M.D., S.D.
Office, School of Public Health, 55 Shattuck St., Boston.

Assistant Dean: Cecil K. Drinker, S.B., M.D., S.D.
Office, School of Public Health, 55 Shattuck Street, Boston.

Secretary: Marian Dale.
Office, School of Public Health, 55 Shattuck Street, Boston.

ADMINISTRATIVE BOARD

President James B. Conant, Ph.D., LL.D. (*ex officio*).

Dean David L. Edsall, A.B., M.D., S.D. (*ex officio*) *Chairman.*

Milton J. Rosenau, M.D., A.M., *Professor of Preventive Medicine and Hygiene.*

Edwin B. Wilson, A.B., Ph.D., *Professor of Vital Statistics.*

Cecil K. Drinker, S.B., M.D., S.D., *Professor of Physiology.*

Wilson G. Smillie, A.B., M.D., *Professor of Public Health Administration.*

Hugh K. Ward, M.B., D.P.H., D.A.
Assistant Professor of Bacteriology and Immunology

OTHER COMMITTEES

Visiting Committee of the School of Public Health appointed by the Overseers: Hugh Cabot, *Chairman*, Daniel F. Jones, Frederic C. Hood, James J. Minot, Robert Amory, B. H. Bristow Draper, Horace Morison, George H. Bigelow, David F. Edwards, Henry Dexter Chadwick.

Committee on Examinations: Edwin B. Wilson, *Chairman*, Cecil K. Drinker, Wilson G. Smillie, Gordon M. Fair, Lemuel R. Cleveland.

Fellowships: Edwin B. Wilson, Cecil K. Drinker.

Library: Reginald Fitz, *Chairman*, Philip Drinker, Cyrus H. Fiske, Ernest E. Tyzzer, Edwin B. Wilson, S. Burt Wolbach, James L. Gamble.

THE HARVARD SCHOOL OF PUBLIC HEALTH

HISTORICAL STATEMENT

The Harvard School of Public Health first gave instruction to students in the academic year 1922–23. For many years activity in public health had been rapidly increasing in Harvard University. The influence of the University upon public health, through the pioneering and long-continued efforts of Dr. Henry P. Walcott, for many years senior member of the Harvard Corporation, was important and far-reaching. Courses in the various departments had been gradually developed to meet the need for men trained to conserve public health. The field of public health is so broad that it is not strange that this School did not find its origin in any one department. The records show certain important steps in what has been essentially a gradual development. In 1909 a department of Preventive Medicine and Hygiene was established in the Medical School. The degree of Doctor of Public Health was first conferred in 1911. In this same year a department of Sanitary Engineering was inaugurated in the Engineering School. In 1913 a department of Tropical Medicine was formed. In 1918 a Division of Industrial Hygiene, with clinical and laboratory facilities, was organized in the Harvard Medical School.

Besides these activities which were directly concerned with the training of men for public health work, research was being carried on in the regular departments of the Harvard Medical School in Bacteriology, Pathology, Parasitology, Physiology, Bio-Chemistry, and others, which had a less direct but very real bearing on the development of the science of public health. On analysis it appeared that there were many activities under the various faculties of Harvard University, besides those of Medicine and Engineering, that had some bearing on public health. Under the Faculty of Arts and Sciences there were many courses, such as those in Physics, Chemistry, Zoölogy, Social Ethics, etc., which formed in certain cases important parts of the training of individuals for work in public health. In addition, there had been established in 1914, under the Faculty of Arts and Sciences, a department of Hygiene, which undertook the supervision of the health of the students in its broadest aspect. This department had collected much data of considerable value in public health.

In 1913 the "Harvard-Technology" School of Public Health was organized. It was under the joint management of Harvard University

and the Massachusetts Institute of Technology. This pioneer School continued to operate until the fall of 1922, when it was superseded by the new Harvard School of Public Health. However, the Massachusetts Institute of Technology continues to coöperate with the Harvard School of Public Health and also offers courses in public health through its department of Biology and Public Health.

As a result of these activities, the University found itself in possession of a substantial nucleus upon which to erect a new School of Public Health of larger scope, and in 1921 received from the Rockefeller Foundation a generous endowment for this purpose, known as the Henry P. Walcott Fund of Harvard University. This gift made it possible: first, to correlate and to enlarge the various departments already existing, such as Preventive Medicine and Hygiene, Bacteriology, Sanitary Engineering, Tropical Medicine, Parasitology, and Industrial Hygiene; second, to create a department of Vital Statistics and to develop new special fields of instruction, such as Public Health Administration, Child Hygiene, Mental Hygiene, Communicable Diseases, and Ventilation and Illumination; and lastly, to purchase a building, standing on land adjacent to that occupied by the Medical School, in which to house the administration and the various groups concerned with the work of public health.

GENERAL STATEMENT

Purpose

It is the object of the School of Public Health to provide the scientific groundwork of expert knowledge which underlies efficient health administration together with some personal acquaintance with modern public health practice of the best types and thus to prepare students for careers in public health. The School of Public Health offers courses and opportunities to fit students for administrative, teaching, field, or laboratory positions. To this end, lectures, laboratory work, hospital exercises, field surveys, and other forms of instruction are offered by members of the Faculty and by special instructors actively engaged in public health work. Coöperation is also maintained with federal, state, and local health departments, and with hospitals and other agencies. Opportunity is given to those who desire to contribute to knowledge through laboratory research or field investigation.

Facilities

Boston affords unusually good opportunities to study the operation and administration of state and municipal departments of health. Immediately adjacent to the School of Public Health is the Medical School

of Harvard University with its well-equipped laboratories and other facilities. In connection with the Port of Boston, the Federal Government maintains maritime quarantine, immigration, medical and other health services. Abundant material for study of problems of mental hygiene may be found at the Psychopathic Hospital and at the Massachusetts Schools for Feeble-Minded at Waverley and Wrentham. In Boston are found the health problems of a metropolitan center, and within easy reach, those of large and small towns, as well as of country districts. Boston is an industrial center and its varied industries afford excellent opportunities for the study of industrial hygiene in all its phases. All the usual philanthropic health activities, such as baby hygiene stations, the Red Cross, anti-tuberculosis organizations, district and public health nursing services, and many other similar agencies are active in and around Boston. In certain cases, where students desire special field or laboratory work not offered in the regular courses, the School of Public Health can secure opportunities with the above health agencies and the various City, State, and private laboratories.

Programs of Study

Public Health Education is founded upon a broad knowledge of three fields, Public Health Administration including Epidemiology, Vital Statistics, and Sanitation. All other subjects constitute specialties.

Students entering the School are divisible into two classes: (1) those coming for some highly specialized type of training and unconcerned with the matter of the certificate or a degree; and (2) those who wish to obtain a certificate or a degree.

Students wishing to become candidates for either the Master or Doctor of Public Health degrees may consider the courses Public Health Administration A, Epidemiology A, Vital Statistics A, and Sanitation A, as representing the minimum requirements in these subjects, but permission may be given by the Administrative Board to omit one or more of these courses if, on conference with the head of the department giving a course, it is felt the student's previous training has been sufficiently advanced.

Candidates for the two degrees will be required to take Bacteriology A, Parasitology A, and Ecology A unless they are able to satisfy the Departments of Bacteriology, Comparative Pathology, and Physiology of their ability to meet the requirements of these courses.

Opportunities for Part-Time Work

Students unable to spend a full academic year at the School may come for one or more months and secure courses in some special field, such as Child Health, Mental Hygiene, Ecology, Hygiene of Ventilation and Illumination, Industrial Medicine, Vital Statistics, Sanitation, Nutrition, Industrial Toxicology, Applied Immunology, and Bacteriology. A glance at the tabular view (pages 41 and 42) will give an idea of the possibilities of this plan for certain courses. Students are thus able not only to take the intensive courses formally offered during the period that they are at the School, but to fit into their programs other training in special fields by individual arrangements with local laboratories, health agencies, and hospitals.

To full-time students in the School of Public Health all the facilities of the University are available and they should consult p. 38 for opportunities that may be especially suited to their particular needs.

ADMISSION REQUIREMENTS

Candidates for the degrees must satisfy the Administrative Board of their academic fitness by a medical degree, or its equivalent, from an approved medical school. Candidates for the Certificate must present evidence of adequate training in English and other modern languages, physics, inorganic, organic and biochemistry, biology, anatomy, histology, physiology, pathology, and bacteriology. The latter represents the minimum requirements for entrance to the Harvard Medical School, plus certain of the fundamental medical sciences of the first two years of the Medical School.

The mere completion of courses is not ordinarily satisfactory evidence of the fitness of a prospective student. The Administrative Board may require further evidence of present ability to utilize the training received, and ability to profit by the courses administered by the School.

The medical degree, or its equivalent, is a prerequisite for the degree of Doctor of Public Health, and Master of Public Health, but not for the Doctor of Philosophy in Hygiene.

Those who do not meet the academic requirements for admission as candidates for degrees may be admitted as students to certain courses and programs of study at the discretion of the Administrative Board.

Opportunities are offered to research students who may desire to investigate special health problems or to make surveys without reference to a degree.

Admission of Women: Women whose previous training and experience are satisfactory may register in this School as special students. As in the past, women may also register for the degree of Doctor of Philoso-

phy in Hygiene through Radcliffe College, taking their work in this School. The University does not confer the degrees of Doctor of Public Health, or Master of Public Health, on women; but they are eligible for the Certificate in Public Health.

A certificate of successful vaccination is required of all new students registering in any department of the University and this should be included with the application for admission.

All inquiries and communications should be addressed to the Secretary of the Harvard School of Public Health, 55 Shattuck Street, Boston, Mass., who will forward upon request catalogues, admission blanks, fellowship applications, and any other information desired.

CERTIFICATE IN PUBLIC HEALTH

Prerequisites: The student must give evidence of having had satisfactory training in modern languages, inorganic, organic and biochemistry, biology, physiology, anatomy, histology, pathology, and bacteriology. As a rule these requirements will be met by students possessing a bachelor's degree plus the first two years in an approved medical school.

The Certificate in Public Health will be granted on satisfactory completion of individual courses in an approved program followed during one academic year in the School of Public Health, and does not require the final general examination essential for the degree of Master of Public Health.

DEGREES

Master of Public Health

Students entering for this degree must present satisfactory evidence of having received the M.D. degree, or its equivalent, from an approved medical school.

Candidacy for the degree of Master of Public Health: Before admission to candidacy for the degree of Master of Public Health, the student will be required to present a program of advanced study covering one year's work.

Final Examination: This is a written examination based upon the minimum requirements stated under programs of study and upon such further subjects as may have been contained in the candidate's approved program of study. *No student whose course record does not show high scholarship will be admitted to this examination without special permission from the Administrative Board.*

Residence: For the degree of Master of Public Health, one academic year must be spent in residence at this University.

Doctor of Public Health

The degree of Doctor of Public Health is not obtained by the completion of a group of courses and submission of a thesis reporting routine observations. It is granted on evidence of real scholarship in the fundamental aspects of public health and presentation of a thesis which displays independent ability and originality in a special field. Two years of work at the School are usually necessary to obtain the Doctorate in Public Health. In instances where preparation has been exceptionally thorough a single year of residence may suffice, but no assurance can be given of this since the preparation of an adequate thesis may readily require more time than was anticipated.

Students contemplating entrance for this degree must present satisfactory evidence of having received the M.D. degree, or its equivalent, from an approved medical school.

Candidacy for the degree of Doctor of Public Health: To qualify as a candidate the student is required to pass an examination of the same type as that required to obtain the degree of Master of Public Health. This examination may be taken without reference to the length of residence as a student. It is intended to provide the assurance that all men receiving the Doctorate in Public Health are grounded in the four fundamental subjects and in the field most closely allied to their special interests. Programs of study or statements of the qualifications of the student for examination must be presented to the Administrative Board when the student enters the school.

Thesis: For the Doctorate in Public Health the student must present a program of independent investigation to the Administrative Board. The result of this investigation will form the basis of the thesis which must be presented as one of the final requirements for graduation. *Two copies* of the thesis must be received by the Dean's Office on or before the first day of January for degrees conferred in February, and on or before the first day of May, for degrees conferred in June. Each copy must be accompanied by a summary not exceeding 1200 words in length which shall indicate clearly its purposes, methods and results.

Examination: The final examination for the Doctor of Public Health degree, after acceptance of a thesis, will be oral. This examination, at which all major departments in the School will be represented, will be arranged by the Committee on Examinations.

Residence: For the degree of Doctor of Public Health, at least one academic year must be spent in residence at this University.

Doctor of Philosophy (in Hygiene)

Properly qualified students in Public Health, who have no medical degree but who wish to secure a higher degree, may obtain a Doctor of Philosophy in Hygiene. This degree is granted by the University to men, or through Radcliffe College to women, on recommendation of a Committee consisting of members of the Faculties of Public Health, of Medicine, and of Arts and Sciences.

Further information may be secured from the Secretary, Division of Medical Sciences, Harvard Medical School.

FEES AND EXPENSES

The fees are: For instruction (including laboratory charges except breakage, damage, and loss of apparatus), $300 for each year.

Tuition will be charged on term bills in four instalments, as follows:

One-fourth on the term bill issued and payable September 24th, 1934.

One-fourth on the term bill issued November 13th and payable November 30th.

One-fourth on the term bill issued January 12th, 1935, and payable January 30th.

One-fourth on the term bill issued April 12th and payable April 30th.

Students desiring to take single courses may do so at the rate of $50 for one full course, payable in advance.

Bills for miscellaneous charges will be rendered at the time the indebtedness is incurred.

All indebtedness to the University must be paid by candidates for degrees at least one day before Commencement.

Students who are candidates for degrees in the middle of the academic year must pay all dues to the University at least one day before the day upon which the degrees are to be voted.

A student who leaves during the year is charged to the end of the tuition period in which he leaves, provided before that time he gives the Dean notice in writing of his withdrawal; otherwise he is charged to the end of the academic year or to the end of the tuition period in which such notice is given.

When a student's connection with the University is severed, all charges against him must be paid at once.

Any student whose indebtedness to the University remains unpaid on the date fixed for payment is deprived of the privileges of the University until he is reinstated. Reinstatement is obtained only by consent of the Dean of the Department in which the student is enrolled, after payment of all indebtedness and a reinstatement fee of $10.

Students owning microscopes are advised to bring them with them. The School has a limited number of microscopes which may be rented upon application to the Administration Office, but offers no guarantee that it will keep on hand a sufficient number of such instruments to furnish one for each student.

BOND REQUIRED OF STUDENTS

Every student is required to file with the Bursar on his entrance to the School a bond of $500 executed by two sufficient bondsmen, one of whom must be a citizen of the United States, or by a surety company duly qualified to do business in Massachusetts. No officer or student of the University is accepted as a bondsman. Blank forms of bonds may be obtained at the Dean's Office or from the Bursar. *Students will be held responsible for the payment of fees until they have notified the Dean, in writing, of their intentions to withdraw from the School.*

MEDICAL ATTENDANCE

The School of Public Health provides a physician to students, who will give medical advice and treatment without charge during the school year. His office hours are 1 to 2 o'clock daily, except Saturdays, in Room 103, Building A, Harvard Medical School. In case of need he may be seen at other times by appointment.

Any illness necessitating absence from work must be reported to the Dean's Office either by the attending physician or by the student if he has not been to a doctor.

Under the auspices of the Department of Medicine of the Harvard Medical School each student will be required to undergo a physical examination shortly after admission to the School. Evidence of having been satisfactorily vaccinated is required for entrance to Harvard University. For information regarding the Stillman Infirmary see the University Catalogue.

FELLOWSHIPS

The School offers a limited number of fellowships to students of high scholarship and exceptional ability who plan to spend not less than one academic year at the School.

Applications for fellowships should be filed with the Secretary of the School.

LOCATION AND BUILDINGS

The School of Public Health is located at 55 Shattuck Street, Boston. The building, formerly occupied by the Infants' Hospital, stands on land

adjacent to that occupied by the Medical School and in close proximity to the Peter Bent Brigham Hospital, the Children's Hospital, the Collis P. Huntington Hospital, and the Lying-In Hospital. The Antitoxin and Vaccine Laboratory of the Massachusetts Department of Public Health is within a comparatively short distance of the School. The Boston Psychopathic Hospital is also within a few blocks. The students of Public Health have the privilege of the full use of the Harvard Medical School buildings.

LIBRARIES

The Library of the School of Public Health is combined with that of the Harvard Medical School on the second floor of the Administration Building of the Medical School. It is open in term time from 9 A.M. until 10 P.M. on week days, from 9 A.M. until 5 P.M. on Saturdays, and from 2 P.M. until 6 P.M. on Sundays. During the summer vacation it is open week days from 9 A.M. until 10 P.M. and on Saturdays from 9 A.M. until 12 M., but is closed on Sundays throughout the day. There are at present 59,524 volumes, 162,030 pamphlets, and 606 current periodicals on file in this library.

Students also have the privilege of using the College Library in Cambridge, as well as the various departmental libraries belonging to the University, in all of which there are 3,471,934 volumes and pamphlets.

The Boston Public Library is open to students who are residents of Boston, and students not residents of Boston who have filed a bond at the Bursar's Office.

The Boston Medical Library, No. 8 The Fenway, contains about 163,283 bound volumes, 109, 816 pamphlets, and 879 current periodicals on file. For those who desire to consult medical literature, this very valuable library is open on week days from 9.30 A.M. to 6 P.M., and on Mondays, Wednesdays, and Fridays until 10 P.M.

HARVARD INFANTILE PARALYSIS COMMISSION

ROGER PIERCE, *Chairman*, RICHARD C. CURTIS, *Treasurer*, W. LLOYD AYCOCK, M.D., GEORGE H. BIGELOW, M.D., HERMANN F. CLARKE, HOMER GAGE, M.D., ARTHUR T. LEGG, M.D., JAMES J. MINOT, M.D., ROBERT B. OSGOOD, M.D., W. RODMAN PEABODY, REDFIELD PROCTOR, MILTON J. ROSENAU, M.D., RICHARD M. SMITH, M.D., CHARLES H. TAYLOR, HANS ZINSSER, M.D., FREDERICK AYER.

A Commission for the study of infantile paralysis was appointed by the Corporation of Harvard University on September 25, 1916.

Since that time the Commission has conducted clinics for the treatment of the paralytic effects of this disease and for early diagnosis and

treatment of its acute stage. In this work the Commission coöperates with the Massachusetts State Department of Health and the Vermont Department of Health. In addition it is conducting a comprehensive study of the cause, mode of spread and prevention of infantile paralysis. This work is carried on at the bedside, in the field and in the laboratory.

The work of the Commission is financed by public subscription.

ANNOUNCEMENT OF COURSES

BACTERIOLOGY

Hans Zinsser, A.M., M.D., Sc.D., *Professor of Bacteriology and Immunology.*

J. Howard Mueller, Ph.D., *Silas Arnold Houghton Associate Professor of Bacteriology and Immunology.*

Hugh Kingsley Ward, M.B , D.P.H., D.A., *Assistant Professor of Bacteriology and Immunology.*

Francis B. Grinnell, A.B., M.D., *Assistant Professor of Bacteriology and Immunology.*

John F. Enders, Ph.D., *Instructor in Bacteriology.*

Elliott S. A. Robinson, A.B., M.D., Ph.D., *Assistant Professor of Applied Immunology* and *Director of the Biologic Laboratories, State Department of Public Health.*

William A. Hinton, S.B., M.D., *Instructor in Bacteriology* and *Assistant Director of Wassermann Laboratory.*

Maximiliano R. Castaneda, M.D., *Instructor in Bacteriology and Immunology.*

Roy F. Feemster, A.B., M.D., Dr. P. H., *Instructor in Applied Immunology* and *Assistant Director of the Biologic Laboratories, State Department of Public Health.*

The Department of Bacteriology and Immunology of the Harvard School of Public Health, in addition to a fundamental course in bacteriology, offers a course of lectures and demonstrations in immunity and specific therapy.

Opportunity for diagnostic serological work is offered in the Department in connection with the Wassermann Laboratory of the State of Massachusetts, and provision is made for individual work upon problems of serum production, standardization, etc., under Dr. Elliott Robinson of the Massachusetts Antitoxin and Vaccine Laboratory.

Advanced work and opportunities for investigation are available, admission to this type of work depending upon the fitness of the applicant.

Bacteriology A

Three afternoons a week (Monday, Wednesday, and Friday) for four months (September 24–February 1), 2–5 P.M. Dr. Ward and associates.

This course deals with the bacteriology of the pathogenic microörganisms in its applications to diagnosis, investigation and prevention of communicable disease. While Public Health students follow the general plan of the medical course, they are segregated under the guidance of Dr. Ward and are given a training more adapted to the needs of public health bacteriologists.

Applied Immunology 33a

Three afternoons a week (Monday, Wednesday, and Friday) for one month (February 4–March 1), 2–5 P.M. Dr. Robinson.

This course, given at the State Antitoxin and Vaccine Laboratory, deals with the methods used in the preparation and testing of serums and vaccines, with a critical discussion of the rationale of the preparation and use of these biologic products.

Bacteriology 32

Two afternoons a week (Tuesday and Thursday) for three months (November through January), 2–3 P.M. Dr. Zinsser.

Immunity. — A course of lectures on the principles and theories of immunity, with practical demonstrations and discussions in which a number of lectures preparatory to the work in the Antitoxin Laboratory will be given by Dr. Robinson.

Bacteriology 31

Arrangements as to hours will be made to suit the needs of individual students. Dr. Hinton.

Diagnostic Serum Reactions. — A short course which deals chiefly with the details of methods of serological syphilis diagnosis, but includes other phases of practical diagnostic public health laboratory work and the organization of laboratories for such purposes.

Since the above series of courses constitutes a complete unit of bacteriological public health laboratory work, it is proposed for students

who take the entire group of courses to treat them as a single course in regard to examination.

This curriculum of bacteriological courses taken in conjunction with epidemiology, vital statistics, sanitary engineering and medical zoölogy, represents a thorough training in that branch of public health which deals with the communicable diseases.

Research in Bacteriology

Special advanced courses will be offered in Immunology and the Technique of Serum Study, and will be open to a limited number of students.

Opportunity will also be given for properly qualified students to pursue research work along varied lines.

APPLIED IMMUNOLOGY — SERUMS AND VACCINES

Elliott S. A. Robinson, A.B., M.D., Ph.D., *Assistant Professor of Applied Immunology* and *Director of the Biologic Laboratories, State Department of Public Health.*

Roy F. Feemster, A.B., M.D., Dr. P.H., *Instructor in Applied Immunology* and *Assistant Director of the Biologic Laboratories, State Department of Public Health.*

Applied Immunology 33a

Three afternoons a week (Monday, Wednesday, and Friday) for one month (February 4–March 1), 2–5 P.M. Dr. Robinson.

This course, which is given at the State Antitoxin and Vaccine Laboratory, deals with the methods used in the preparation and testing of serums and vaccines, with a critical discussion of the rationale of the preparation and use of these biologic products.

In addition to the courses given jointly by the Massachusetts Antitoxin and Vaccine Laboratory and the Department of Bacteriology (for details see Bacteriology), opportunities will be afforded to properly qualified students who desire special instruction in the production of biologic products to study and participate in the preparation and testing of serums and vaccines.

Facilities are also offered to candidates for the higher degrees to carry on original work in immunology.

COMPARATIVE PATHOLOGY

Ernest E. Tyzzer, A.M., M.D., *Professor of Comparative Pathology.*

Marshall Hertig, Ph.D., *Assistant Professor of Entomology.*

Donald L. Augustine, S.B., Sc.D., *Assistant Professor of Helminthology.*

Hans Theiler, M.R.V.S., *Instructor in Protozoölogy.*

Parasitology A

Two afternoons a week (Tuesday and Thursday) for two months (February 5–March 28), 2–5 P.M. Dr. Tyzzer and associates.

The course consists of lectures, laboratory exercises and demonstrations dealing with helminths, protozoa and arthropods of importance to public health, with the object of training the student in the identification of the more important parasites, and study of their life histories with reference to prevention and control. The agency of insects and other arthropods in the transmission of disease will receive special consideration.

Students with special backgrounds and interests are encouraged to undertake special or advanced work along with, or in lieu of, the regular course. Investigations of members of the Department have provided material, including cultures and other living material, in a number of fields. Among the subjects available for special work are: trichinosis, with special reference to skin and precipitin tests; hookworms; ascariasis; amebiasis, methods of diagnosis and cultivation; trypanosomiasis; leishmaniasis; rearing and dissection of various insects such as mosquitoes, bedbugs, fleas, Phlebotomus sandflies, et cetera; identification of Anopheline mosquitoes; insect rickettsiae.

Advanced Work in Medical Zoölogy

Advanced courses and research in Protozoölogy, Helminthology, and Medical Entomology may be arranged for qualified students.

COMMUNICABLE DISEASES

Charles F. McKhann, M.A., M.D., *Assistant Professor of Pediatrics and Communicable Diseases.*

R. Cannon Eley, M.D., *Instructor in Pediatrics and Communicable Diseases.*

Lucius E. Eckles, M.D., *Assistant in Pediatrics and Communicable Diseases.*

Communicable Diseases A

Two mornings a week (Tuesday and Saturday) for one month (February 5–March 2), 9–11 A.M. Dr. McKhann and Dr. Eley.

Bacteriology A and Epidemiology A are prerequisites for this course, which consists of lectures, demonstrations, clinics, and conferences on the care and management of patients with communicable diseases, with special consideration of problems which are solved jointly by the public health official and the practicing physician.

Communicable Diseases B

Three mornings a week (Tuesday, Thursday, and Saturday) 9–11 A.M., during March or April. Dr. McKhann and Dr. Eley. *Limited to two students per month.*

This course consists of a service as observer and clerk in the Isolation Division of the Out-Patient Department and on the Isolation Wards of the Children's Hospital. It is intended to familiarize the public health student with the diagnostic and therapeutic problems encountered in the care of the individual patient and the determination of the proper and practical disposition of patients suffering from communicable diseases.

Communicable Diseases C

The course in communicable diseases offered to third year medical students (Wednesday afternoons during the second half-year, 2–4 P.M.) is open to students enrolled in the School of Public Health, after consultation with the professor in charge.

Research in Communicable Diseases

Opportunity is offered to qualified students to pursue research work in communicable disease problems in the Department of Communicable Diseases or in conjunction with the Department of Bacteriology and Immunology.

TROPICAL MEDICINE

Richard P. Strong, Ph.B., M.D., S.D., *Professor of Tropical Medicine.*

Andrew Watson Sellards, A.M., M.D., *Associate Professor of Tropical Medicine.*

George C. Shattuck, M.D., A.M., *Assistant Professor of Tropical Medicine.*

Joseph Bequaert, Ph.D., *Assistant Professor of Entomology.*

Lemuel R. Cleveland, B.S., D.Sc., *Assistant Professor of Protozoölogy.*

Jack H. Sandground, D.Sc., *Assistant Professor of Tropical Helminthology.*

Alexander Hamilton Rice, M.D., A.M., *Professor of Geographical Exploration and Lecturer on Diseases of South America.*

Roland C. Connor, M.D., *Lecturer on Tropical Medicine.*

Carlos Chagas, A.M., *Lecturer on Tropical Medicine.*

Afranio do Amaral, B.Sc., B.Litt., M.D., Dr.P.H., *Lecturer on Ophiology.*

Albert A. Hornor, A.B., M.D., *Assistant in Tropical Medicine.*

Maurice B. Strauss, A.B., M.D., *Assistant in Tropical Medicine.*

Medical Zoölogy and Tropical Medicine A

Three afternoons a week (Monday, Wednesday, and Friday) for four months (February 4–June 1), 2–5 P.M.

Instruction in this course will be furnished by the staff of the Department of Tropical Medicine. Clinical, epidemiological, and pathological aspects of the subjects under consideration will be presented at appropriate times in connection with the laboratory studies.

1 — Infectious Diseases

Three afternoons a week (Monday, Wednesday, and Friday) for one month (February 4–March 1), 2–5 P.M. Dr. Strong and associates.

The course during this month consists of lectures, laboratory work, and clinical instruction.

The most important infectious and other preventable diseases of tropical and foreign countries will be dealt with from the following points of view:

1. The etiology, principles, and modern methods of diagnosis.
2. The methods of transmission and mode of spread.
3. The hygienic problems involved in their control and prevention.
4. The administrative and practical measures to be employed in the control of these diseases under endemic and epidemic conditions.

2 — Medical Entomology

Three afternoons a week (Monday, Wednesday, and Friday) for one month (March 4–March 29), 2–5 P.M. Dr. Bequaert.

This course presupposes an elementary knowledge of insects. It will include a survey of the more important arthropods concerned in the health of man, both in temperate and tropical regions. Emphasis is placed upon those arthropods which act as disease transmitters, with a

study of life histories, habits, and methods of control. Opportunities are offered for becoming acquainted with methods of collecting, identifying, dissecting and preparing material, and the rearing of insects in experimental studies. A study will be made of the various ways in which these organisms are active either as parasites, as carriers of diseases, or as the cause of local injuries or physiological disturbances. Laboratory work will provide practical training in identification, dissection, methods of studying life histories and habits, and experimental transmission of diseases. Stress will be laid upon furnishing the student with the most useful monographs and reference books. Students may go on further to become acquainted with the extensive special literature so as to be able to carry on independent research work in tropical and foreign countries.

3 — Protozoölogy

Three afternoons a week (Monday, Wednesday, and Friday) for one month (April 8–May 3), 2–5 P.M. Dr. Cleveland.

This course will consist, for the most part, in a study of the protozoa that occur in man. These organisms will be studied both from the medical and biological standpoint. Special emphasis will be placed on the morphology of the non-pathogenic as well as the pathogenic species, since the disease producing protozoa can only be distinguished from those that are harmless by careful morphological studies of both groups. Living and stained organisms will be used. Life-cycles and methods of transmission will be considered. Any student who wishes to undertake additional work will be given an opportunity to do so provided his previous training qualifies him for the work he wishes to carry out and if adequate departmental facilities are available.

4 — Helminthology

Three afternoons a week (Monday, Wednesday, and Friday) for one month (May 6–May 31), 2–5 P.M. Dr. Sandground.

During this period the course is designed to give the student a general knowledge of the biology of the helminths, and to acquaint him with those species parasitic in man and the diseases caused by them. Emphasis will be placed upon the symptomatology, methods of diagnosis and treatment; and the life cycles in relation to the transmission, prophylaxis and control of these parasites. To meet the special interests of students conferences may be arranged for the discussion of various phases of the subject, and for the review of current literature.

Advanced Work in Tropical and Exotic Diseases

For students entering the School with the intention of specializing in public health in tropical countries, a series of courses lasting eight months is provided by members of the staff of the Department. The program followed must include advanced courses in exotic and tropical diseases in:

1. Practical bacteriology and pathology.
2. Practical protozoölogy and helminthology.
3. Practical entomology.
4. Epidemiology (including field work).
5. Clinical, at infectious diseases hospital.

The courses in bacteriology, protozoölogy, helminthology, and entomology are fundamental in connection with the prevention and control of tropical or exotic diseases. Courses relating to tropical climatology, botany, venomous animals and the biological effects of sunlight in tropical countries will also be of advantage and of particular interest to the health officer who desires a more cosmopolitan experience, and such are provided for those students desiring them. The need for thoroughly trained men in the field of exotic and tropical medicine is especially urgent.

The program for such advanced students will naturally vary in individual cases and must be approved by the Professor of Tropical Medicine before submission to the Administrative Board.

Special Clinical Work: There are opportunities from time to time for one or more students to attend clinical work for longer or shorter periods at the Boston City Hospital, where there is a service for tropical and foreign diseases under Dr. George C. Shattuck of the Department. There are also opportunities for special clinical work in several hospitals or in the different laboratories situated in the tropics with which Harvard University is connected.

Research in Tropical and Foreign Medicine

The research work in progress includes studies on the etiology and prevention of yellow fever; the symbiosis between Cryptocercus and its protozoa; cytology of hypermastigotes; role of the centriole in mitosis; causes of encystation, cellulose digestion in protozoa; studies on onchocerciasis and its prevention in Guatemala; entomological studies of the parasitic and blood-sucking insects of Guatemala in relation to onchocerciasis; taxonomic studies on ticks, Hippoboscidae and Tabanidae; relations of human, bovine and equine species of Onchocerca

leading to a revision of the genus; general taxonomic studies of other helminth groups; tests of newer drugs in the therapeusis of taeniaisis; medical surveys and the etiology of certain affections in Guatemala.

PREVENTIVE MEDICINE AND EPIDEMIOLOGY

Milton J. Rosenau, M.D., A.M., *Charles Wilder Professor of Preventive Medicine and Hygiene.*

Lloyd D. Felton, A.B., M.D., D.Sc., *Assistant Professor of Preventive Medicine and Hygiene.*

Elliott S. A. Robinson, A.B., M.D., Ph.D., *Assistant Professor of Applied Immunology,* and *Director of the Biologic Laboratories, State Department of Public Health.*

W. Lloyd Aycock, M.D., *Assistant Professor of Preventive Medicine and Hygiene.*

Joseph W. Schereschewsky, A.B., M.D., *Associate in Preventive Medicine and Hygiene.*

William A. Hinton, B.S., M.D., *Instructor in Preventive Medicine and Hygiene.*

Roy F. Feemster, A.B., M.D., Dr.P.H., *Instructor in Applied Immunology* and *Assistant Director of the Biologic Laboratories, State Department of Public Health.*

Howard B. Andervont, B.S., Sc.D., *Instructor in Epidemiology.*

Frederic W. Ilfeld, A.B., M.D., *Assistant in Epidemiology.*

Epidemiology A

Lectures: *three mornings a week (Monday, Tuesday, and Wednesday) for four months (September 24–February 1), 11.30 A.M.–12.30 P.M.* Dr. Rosenau and associates.

Field work — All day Thursday during October and January, Thursday mornings during November and December.

The course consists of lectures, demonstrations, and practical field work. The lectures are designed to give the principles, historic development, and methods of epidemiology, with their application to public health administration of the communicable diseases. The field work is done in coöperation with the Department of Public Health Administration and the Massachusetts State Department of Public Health.

Epidemiology B

Advanced work. By arrangement with Professor Rosenau.

This consists in special investigations of a particular disease or problem from both the field and the laboratory standpoints.

Research in Preventive Medicine and Epidemiology

During the past year research has been carried on in the following subjects: pneumonia (Felton), cancer (Schereschewsky), infantile paralysis (Aycock), filterable viruses (Andervont), vaccinia (Rosenau and Dearing). Properly qualified students desiring to do advanced work will be welcomed into any of the lines of research which have been reviewed.

PUBLIC HEALTH ADMINISTRATION

Wilson G. Smillie, A.B., M.D., Dr.P.H., *Professor of Public Health Administration.*

Henry D. Chadwick, M.D., *Lecturer on Public Health Administration* and *Commissioner, Department of Public Health of Massachusetts.*

William F. Wells, S.B., *Instructor in Sanitary Science.*

Gaylord W. Anderson, A.B., M.D., *Assistant in Public Health Administration* and *Deputy Commissioner, Department of Public Health of Massachusetts.*

Public Health Administration A

Lectures: *three mornings a week (Monday, Wednesday, and Friday) for four months (September 24–February 1), 10.15–11.15 A.M., with a colloquium on Fridays 11.30 A.M.–12.30 P.M.* Dr. Smillie and associates.

Field work — All day Thursday during October and January, Thursday mornings during November and December.

Lectures: The theory of public health administration is developed by a study of the administrative methods actually employed in various governmental units, including municipalities, counties, states, and the federal government, with comparative studies of public health administration in various foreign countries. The lectures are given by Dr. Smillie and by the State Health Commissioner of Massachusetts and his staff. Certain phases of public health administration are covered by special lecturers who are invited from time to time to cover those par-

ticular fields upon which they can speak with authority. During the year 1933–34 special lectures were given by:

Dr. Lewis W. Hackett, *Assistant Director, International Health Division, Rockefeller Foundation, Rome, Italy.*

Dr. Roderick Heffron, *Field Director, Pneumonia Service, Massachusetts State Health Department.*

Dr. Herbert L. Lombard, *Director, Division of Adult Hygiene, Massachusetts State Health Department.*

Dr. N. A. Nelson, *Director, Venereal Disease Control, Massachusetts State Health Department.*

Miss Sophie C. Nelson, *Director, Visiting Nurse Service, John Hancock Mutual Life Insurance Company, Boston.*

Dr. Thomas Parran, Jr., *Commissioner of Health, New York State.*

Dr. C. L. Scamman, *Director, Division of Public Health, Commonwealth Fund, New York.*

Professor C. E. Turner, *Department of Public Health, Massachusetts Institute of Technology.*

Each student compiles his own textbook during the course, using a loose-leaf system. The notes on the lectures are supplemented by pamphlets, reprints, forms, and references to specific phases of the work, and the current literature is abstracted, so that at the end of the course the student has a nucleus for a public health reference library which can be enlarged from year to year.

Conferences: The last hour each Friday morning is devoted to a discussion of the material presented during the week and a presentation of special student exercises. Each student is allowed to choose some specific governmental unit and develop a suitable and complete plan of public health administration for this unit. In doing this he should coördinate his training in vital statistics, bacteriology, child hygiene, and epidemiology, applying this knowledge in the organization of a theoretical department, making suitable budgets for each division, determining the number of personnel, and outlining the activities of the various bureaus.

Field Studies and Demonstrations: These are arranged for Thursday from October through January and are given in coöperation with the Departments of Epidemiology and of Child Hygiene. The exercises are selected to illustrate the practical application of the data that have been presented in the lectures. Active coöperation has been effected

with the Health Department of the City of Boston, the Massachusetts State Department of Public Health and the Connecticut State Department of Health; also with the City Department of Health, Providence, R. I.; the City of Brookline, City of Newton, and many other official and unofficial health agencies.

A wide variety of special fields in public health administration is available for observation and study by the students, including special activities in large and small city health departments, rural boards of health, departments of school medical inspection, public health nursing, communicable disease control, health units, clinics for the control of tuberculosis and venereal disease, health examinations, contagious disease hospitals, etc.

GRAPHIC METHODS

Three afternoons a week (Monday, Wednesday, and Friday) for two months (March 4–May 3), 2–5 P.M. Mr. Wells.

This is a voluntary course and is designed to fill the rapidly growing need for rational treatment of graphic methods of recording, analyzing, and presenting data. Graphic elements are developed into a method of visual representation of public health concepts. Useful mathematical relationships are solved by simple graphical methods in the analysis of data and an effective medium provided for emphasizing significant facts. The simple treatment of relationship, graphic geometry, arithmetic, algebra, and calculus, forms a basis for applied graphics, plans and drawings, maps and sketch mapping, charts and models. Practical exercises in graphic technique, lettering, light and shade, form and color, serve to enhance the usefulness of graphic devices found in various other courses and to develop an attitude of constructive criticism in the art of visual education.

Research in Public Health Administration

Advanced students are offered the opportunity to undertake special studies in Public Health Administration. The student must have completed Public Health Administration A, Epidemiology A, and Vital Statistics A before registering for this work.

DIAGNOSIS

Many men who have had positions as health officers have found it profitable to review the general field of medical diagnosis while in the School. Needs in this regard are apt to vary greatly from man to man,

but the subjects most frequently reviewed are pulmonary tuberculosis, and the general problems of children's diseases. Work in these fields, and in others which may be required, can readily be arranged and will, if possible, include actual examination of patients on the part of the student.

CHILD HYGIENE

Richard M. Smith, A.B., M.D., ScD., *Assistant Professor of Pediatrics and Child Hygiene.*

Harold C. Stuart, Litt.B., M.D., *Assistant Professor of Pediatrics and Child Hygiene.*

M. Luise Diez, M.D., *Instructor in Child Hygiene.*

Florence L. McKay, A.B., M.D., *Instructor in Child Hygiene.*

Abraham S. Small, M.D., *Instructor in Pediatrics and Child Hygiene.*

Harvey Spencer, A.B., M.D., *Assistant in Pediatrics and Child Hygiene.*

Stewart H. Clifford, M.D., *Instructor in Pediatrics and Child Hygiene.*

Rachel Hardwick, B.S., M.D., *Assistant in Child Hygiene.*

Psyche Cattell, Ed.D., *Research Fellow in Child Hygiene*

Elizabeth P. Trevett, A.B., *Research Fellow in Child Hygiene.*

Josephine G. O'Brien, R.N.

Child Health A

Lectures: *three mornings a week (Monday, Wednesday, and Friday) for four months (September 24–February 1), 9–10 A.M.* Dr. Smith, Dr. Stuart and associates.

Field Work: *All day Thursday during October and January, Thursday mornings during November and December, in conjunction with Public Health Administration A and Epidemiology A.*

This course presents in broad outline various subjects which have an important relation to child health. They are grouped under three general divisions.

1. — Growth and Development

The lectures on Growth and Development consider not only normal occurrences, but the requirements for satisfactory progress, and the problems of health appraisal in childhood. An attempt is made in this division to cover the scientific foundations upon which activities in the field of child health should be constructed.

2. — Morbidity and Mortality

Lectures on Morbidity and Mortality focus attention upon the chief conditions requiring preventive effort and the prevalence of various risks and handicaps.

3. — Child Hygiene

This division deals with the methods and channels of applied child health activities, both public and private. Field exercises, as well as lectures, demonstrate activities in child hygiene.

Through the field exercises an opportunity is offered to study at first hand the work of the Division of Child Hygiene of the State Department of Public Health, the Infant and Pre-School Child Welfare Conferences of the Boston City Health Department, and the health programs of several schools in the vicinity. The care and protection of handicapped children is also demonstrated on visits to such institutions as the Florence Crittenton Home, the Home for Little Wanderers, and the State Hospital School at Canton.

During the year 1933–34 special lectures and instruction were given by the following:

Francis P. Denny, M.D.
Robert L DeNormandie, M.D.
Mr. Philip Drinker
Miss Abigail A. Eliot
John E. Fish, M.D.
David M. Hassman, M.D.
Miss Katharine Hitchcock
Percy R. Howe, D.D.S.
Mr. Cheney Jones
Foster S. Kellogg, M.D.
John Kuhns, M.D.
Miss Cornelia Macpherson
Charles McKhann, M.D.
Miss Janet Merrill
C. Stanley Raymond, M.D.
Mr. Carl Schraeder
Mr. Eugene Smith
Douglas A. Thom, M.D.
Mr. Alfred Whitman
Charles F. Wilinsky, M.D.
Mr. Herbert Parsons

Child Health B

For students who have completed Child Health A it will be possible by special arrangement with the head of the department to devote additional time to the various phases of child health work. They may be assigned to hospital and child welfare clinics where an opportunity will be given to share in the conduct of the work.

Research in Child Hygiene

There will be an opportunity for qualified students to investigate any phase of child hygiene. The results of such special studies may be published by the student if approved by the head of the department.

MENTAL HYGIENE

C. Macfie Campbell, M.A., B.Sc., M.D., *Professor of Psychiatry.*

Frederick L. Wells, Ph.D., *Assistant Professor of Psychology.*

Karl M. Bowman, A.B., M.D., *Assistant Professor of Psychiatry.*

Harry C. Solomon, S.B., M.D., *Assistant Professor of Psychiatry.*

Henry B. Elkind, M.D., Dr.P.H., *Assistant in Mental Hygiene.*

James V. May, A.B., M.D., *Lecturer on Mental Hygiene.*

With the coöperation and assistance of special lecturers, instructors, and assistants.

Mental Hygiene A

Three mornings a week (Tuesday, Thursday, and Saturday) for two months (April 9–June 1), 9–11 A.M. Dr. Campbell and associates.

This course, under the direction of Dr. Campbell, offers the student opportunity for becoming familiar with the general field of mental hygiene and with its relations to other aspects of public health.

Mental Hygiene covers not only the traditionally recognized conditions of mental disorder ("Insanity") and defect ("Feeble-mindedness"): it deals also with manifold forms of apparent physical incapacity (including the "psychoneuroses"), with many social problems (prostitution, alcoholism, vagrancy), with maladjustments in home, in school, in industry.

The course will include a review of the fundamental principles of abnormal psychology, of the main types of mental abnormality, of the prevention, management and treatment of the personal and social factors involved in these disorders, and of the organization by the community of the necessary facilities for dealing with these problems.

The course will consist of lectures, clinical demonstrations, visits to hospitals, courts and other organizations, with supervised reading and opportunities for intensive clinical study along special lines (neurosyphilis, school hygiene, delinquency).

Elementary Mental Hygiene

Mondays 4 to 5 P.M., for ten weeks, beginning the middle of March.

This is a preliminary course on Medical Psychology given to the first-year medical students, consisting of lectures by Dr. Campbell and Dr. Wells.

Research in Mental Hygiene

Students holding the degree of Doctor of Medicine who satisfy the professor of their qualifications to do advanced work in Mental Hygiene may spend from one to six months under the guidance of Professor Campbell, working at the Boston Psychopathic Hospital.

PHYSIOLOGY

Cecil K. Drinker, S.B., M.D., S.D., *Professor of Physiology.*

Lawrence T. Fairhall, Ph.D., *Assistant Professor of Physiology.*

Louis A. Shaw, A.B., *Instructor in Physiology.*

Madeleine E. Field, Ph.D., *Instructor in Physiology.*

John William Heim, Ph.D., *Assistant in Physiology.*

Albert R. Behnke, B.A., M.D., *Research Fellow in Psysiology.*

Ecology A

Two afternoons a week (Tuesday and Thursday) for two months (April 2–May 30), 2–5 P.M. Dr. Drinker and associates.

Ecology is that branch of biological science which deals with the relations of living organisms to their surroundings.

It is the effort of sanitary engineering to provide living and working conditions safe and tolerable for man all over the world and under many different circumstances. The human organism reacts characteristically to many changes in physical environment, to chemical changes in the atmosphere, and to alterations in food supply. In every instance large groups of people are involved and a reasonable knowledge of the principles of public health thus requires realization of the effects of the commoner environmental conditions met by man. These are heat, cold, humidity, dryness, alterations in barometric pressure, light, contamination of the atmosphere by smoke, dusts and chemicals, and changes in diet.

The course will consist of lectures, conferences and demonstrations covering the reaction caused by the varieties of human experience.

Research in Physiology

Properly qualified students will be given opportunities to work in the laboratory provided they can spend at least six months of undivided time.

Nutrition A

Lectures and laboratory work: *three afternoons a week (Monday, Wednesday, and Friday) for two months (March 4–May 3) 2–5 P.M.* Dr. Fairhall. Students wishing to do so may take the lectures only.

This course consists of lectures, conferences, and assigned reading upon the chemistry and physiology of nutrition, particularly from the point of view of large groups of people. It will include discussion of the more vital and practical aspects of metabolism and diet. Especial attention will be directed to modern problems in the economics of food production, distribution, utilization and food control. During the course visits will be made to various plants producing and handling articles of food.

An opportunity for laboratory work will be given to properly qualified students. This will consist of a study of the more important practical methods of metabolism; the determination of the caloric value of foodstuffs; the determination of the protein fat and carbohydrate values of foods; the importance of the ash constituents from the viewpoint of mineral metabolism and the micro-analytical rating of foods with respect to spoilage, contamination, and adulteration.

Microchemical Analysis

Hours to be arranged according to individual needs.

An elective course, offered only to students properly qualified in chemistry, in micromethods of analysis of arsenic, mercury, lead and other poisonous metals, dusts, fumes and gases of importance in industrial hygiene.

PUBLIC HEALTH ENGINEERING

Sanitation and Industrial Hygiene

Philip Drinker, S.B., Ch.E., *Associate Professor of Industrial Hygiene.*

Gordon M. Fair, S.B., *Associate Professor of Sanitary Engineering.*

Melville C. Whipple, *Assistant Professor of Sanitary Chemistry.*

Constantin P. Yaglou, A.B., M.E., M.M.E., *Assistant Professor of Industrial Hygiene.*

Theodore Hatch, M.S., *Instructor in Industrial Sanitation.*

William F. Wells, S.B., *Instructor in Sanitation.*

Robert M. Thomson, *Assistant in Industrial Hygiene.*

Hygiene of Ventilation and Illumination A

Two mornings a week (Tuesday and Thursday) for three months (February 5–May 2), 9–11 A.M. Assoc. Prof. Drinker and associates.

Lectures and demonstrations on the hygienic, rather than the engineering, aspects of ventilation and illumination. The course is given in close coöperation with the Department of Physiology of the School of Public Health.

The lectures and demonstrations cover the following general topics:

Physical properties of the air and their physiologic influence upon the human body.

Atmospheric Impurities.

Barometric Pressure.

Illumination.

Sanitary Air Analysis

Three mornings a week (days to be arranged) for four months (February to May inclusive), 9–12 A.M. Mr. Hatch and associates.

Measurement and interpretation of adverse atmospheric conditions found in work places of all types, such as factories and mills, and in assembly halls. Methods employed in determining (*a*) physical properties of the air, such as temperature, humidity, and air motion; (*b*) atmospheric impurities — gases and dusts, and normal constituents of the air; (*c*) efficiencies of protective devices — masks, respirators, mechanical dust collecting apparatus; (*d*) efficiencies of air-conditioning equipment; (*e*) corrective measures for unfavorable conditions.

Ventilation Engineering and Air Conditioning

Two one and one half hour sessions a week (time to be arranged with Engineering School) throughout first semester. Asst. Prof. Yaglou and associates. For engineers and architects.

Principles and practice of ventilation, air conditioning and refrigeration.

Research in Ventilation and Illumination

A limited number of qualified students will be given an opportunity to do research work on any of the subjects covered in the three courses offered by this Department.

At present four research problems are under study: (1) the control of dust generated in industrial processes, (2) estimation of dust concentrations, (3) atmospheric conditions — temperature, humidity, air motion, and ionization — their measurement, control, and effect on man and animals, (4) air requirements for ventilation.

The Principles of Sanitation A

Three mornings a week (Monday, Wednesday, and Friday) for four months (February 4–May 31), 9–12 A.M. at Pierce Hall, Cambridge. Professor Fair and associates.

A course of lectures, demonstrations, laboratory work and inspections arranged especially for students in the School of Public Health. The following topics will be studied: (*a*) Water Supply — collection, purification and distribution; (*b*) Sewerage — collection, treatment and disposal; (*c*) Analysis of Water and Sewage — physical, chemical and biological; (*d*) Ventilation — physical properties of clean and impure air and their physiological effects; (*e*) Illumination; (*f*) Housing, City Planning and Zoning; (*g*) Rural Sanitation; (*h*) Biological Control — insects and rodents; (*i*) Food Sanitation — production, preservation, distribution and preparation; (*j*) Milk Sanitation; (*k*) Shellfish Sanitation; (*l*) Garbage and Refuse — collection and disposal; (*m*) Sanitation of Schools, Camps and Bathing Places.

Sanitary Chemistry and Biology

Three afternoons a week (Monday, Wednesday, and Friday) for four months (October, November, December, and January), 2–5 P.M. Asst. Professor Whipple.

Laboratory methods employed in the study of sanitary projects; microscopy of water and sewage; physical, chemical, and bacteriological methods of sanitary analysis; field work in limnology, stream pollution and plant operation.

Research in Sanitation

There is opportunity for properly qualified students to pursue advanced work in subjects relating to the field of sanitation.

INDUSTRIAL MEDICINE

W. Irving Clark, A.B., M.D., *Assistant Professor of the Practice of Industrial Medicine.*

Alice Hamilton, M.D., A.M., *Assistant Professor of Industrial Medicine.*

Industrial Medicine A

Time to be arranged. Dr. Clark.

A survey of industrial medicine and the methods of industrial practice. A number of the more important phases and contacts will be discussed.

Industrial Toxicology A

Time to be arranged. Dr. HAMILTON.

This is an advanced course which will include lectures, conferences, and assigned reading upon the industrial poisons, together with visits to factories and definite studies of field conditions.

VITAL STATISTICS

EDWIN B. WILSON, Ph.D., *Professor of Vital Statistics.*

CARL R. DOERING, M.D., D.Sc., *Assistant Professor of Vital Statistics.*

Vital Statistics A

Two mornings a week (Tuesday and Saturday) for four months (September 25–February 2), 9–11.15 A.M. Dr. DOERING.

This introduction to Vital Statistics will consist of lectures, recitations, and written work designed to familiarize the student with (1) the general facts already well established in demography, (2) the methods of graphical representation, (3) the calculation and use of averages and of measures of variation, and (4) the common types of rates, their adjustment and comparison.

Text: G. C. WHIPPLE, *Vital Statistics.*

Reference: M. J. ROSENAU, *Preventive Medicine*, Chap. XXX, by C. R. DOERING.

Vital Statistics A2

Three mornings a week (Tuesday, Thursday, and Saturday) for four months (February 5–June 1), 11.15 A.M.–12.45 P.M. Professor WILSON.

This course deals with the elements of the theory of statistical method with especial emphasis on those types of reasoning which are important for the proper planning and execution of field or laboratory investigations. It includes (1) the basic theory of probability, including errors of sampling, (2) association (Yule) and correlation, (3) arithmetic and geometric trends and, as time permits, various other topics such as life tables, rise and fall of epidemics, and the analysis of variation into component parts.

References: G. C. WHIPPLE, *Vital Statistics.*
G. W. YULE, *Introduction to the Theory of Vital Statistics.*

Vital Statistics B

Professor Wilson or Dr. Doering

A reading course, in either or both half-years, without specific assignment of hours, for students who have a satisfactory knowledge of elementary statistics and wish individual supervision in their study of more advanced parts of the subject.

Vital Statistics C

Professor Wilson or Dr. Doering

A research course, in either or both half-years, for students, whether specializing in Vital Statistics or in any other field of public health or the social disciplines, who desire to make statistical investigations of their own or to coöperate in the general statistical research of the Department.

COURSES IN OTHER DIVISIONS OF THE UNIVERSITY

Students in the School of Public Health may take courses in other departments of the University subject to the following conditions: (1) Students must be properly qualified; (2) the consent of the professor in charge of the course must be obtained in each case; (3) the approval of the Administrative Board of the School of Public Health must be procured before one of these courses may be included as a part of a program.

Many courses offered in the Medical School and the Courses for Graduates are of special interest and value to students of public health.

Those interested in dental work may take advantage of courses offered in the Dental School.

Students who are planning to teach public health, or who wish to make a study of its educational side, may have the opportunity of taking courses in the Graduate School of Education.

The Graduate School of Business Administration offers courses of interest to students specializing in Industrial Hygiene and Public Health Administration.

COURSES IN MASSACHUSETTS INSTITUTE OF TECHNOLOGY

The School of Public Health maintains close coöperation with the Massachusetts Institute of Technology. A group of courses given at the Massachusetts Institute of Technology, but not listed in this catalogue, is open to the students in the School of Public Health, and may, with the approval of the Administrative Board, be included in a general program and counted toward a degree.

STUDENTS 1933–34

Caudill, Fred W., A.B., M.D.	Georgetown, Ky.
Chason, Otis L., S.B., M.D., M.P.H., II yr.	Montgomery, Ala.
Fox, Robert E., A.B., M.D.	Asheville, N. C.
Goldstein, Samuel, S.B.	Brookline, Mass.
Hanlon, John J., S.B.	Boston
Haskell, Joe S., M.D.	Los Angeles, Cal.
Hsu, Su-En, S.B., M.D.	Soochow, China
Johnston, Harold M., M.B., CH.B.	Black River, Jamaica
Knowlton, Wilson W., S.B., M.D.	Boston
Lahiri, Manindra N., M.D.	Benares City, India
Lopez, Salvador R., M.D.	Mayaguez, P. R.
Messinezy, Demetrius A., M.D.	Athens, Greece
McGavran, Edward G., A.B., M.D.	Sidell, Ill.
Pettingell, John M., S.B.	Belmont, Mass.
Perry, Alton R., A.B., M.D.	Greenville, Miss.
Shah, Khwaja S., D.T.M., DR.P.H.	Lahore, India
Snedeker, Lendon, A.B., M.D.	Boston
Stewart, Ann H., A.B., M.D.	Newton, Mass.
Stüber, Katharina, M.D.	Berlin, Germany
Tanner, Jacob L., A.B., M.D.	Albany, Ky.
Venkatraman Kandadai V., M.D., M.B.BS.	Madras, India
White, Clarence H., S.B., M.D.	Townsville, N. C.
Yang, Yung N., M.D.	Peiping, China
Zovickian, Hovhannes, PH.B., A.M., M.D.	Watertown, Mass.

DEGREES

On June 22, 1933, Degrees and Certificates were conferred as follows:

Doctor of Public Health

Akatsuka, Keiji, M.D. (*Tokyo Imperial Univ.*) 1925, M.P.H. (*Harvard Univ.*) 1932, Kagoshima, Japan

Lawson, George McLean, M.D. (*Yale Univ.*) 1924, Louisville, Ky.

Master of Public Health, *Cum laude*

Applewhite, Calvin C., A.B. (*Millsaps Coll.*) 1907, M.D. (*Vanderbilt Univ.*) 1913, Jackson, Miss.

Chope, Harold D., A.B. (*Stanford Univ.*) 1926, M.D. (*ibid.*) 1931, Richmond, Cal.

Peck, Eugene, C., A.B. (*Harvard Univ.*) 1916, M.D. (*ibid.*) 1919, New London, Conn.

Master of Public Health

Buker, Richard S., S.B. (*Bates Coll.*) 1921, M.D. (*Harvard Univ.*) 1925, Hebron, Me.

Dauer, Carl C., A.B. (*Heidelberg Coll.*) 1916, M.D. (*Western Reserve Medical School*) 1920, Salem, Ore.

Gray, Archie L., S.B. (*Mississippi State Coll.*) 1924, M.D. (*Univ. of Tenn.*) 1930, Fulton, Miss.

Knox, Joseph C., M.D. (*Univ. of Maryland*) 1924, Raleigh, N. C.

Lunsford, William F., S.B. (*Oklahoma Univ.*) 1921, M.D. (*ibid.*) 1923, Poteau, Okla.

Mercer, Nathaniel A., M.D. (*Univ. of Louisville*) 1931, Breeding, Ky.

Musson, Eldred K., M.D. (*Univ. of Kansas*) 1928, Norborne, Miss.

Shackelford, John W., S.B. (*Univ. of Mississippi*) 1924, M.D. (*Tulane Univ.*) 1926, Greenville, Miss.

Certificate in Public Health

Archibald, Robert E., M.D.C.M. (*Dalhousie Univ.*) 1925, Lynn, Mass.

Austin, Burton F., M.D. (*Univ. of Alabama*) 1917, Montgomery, Ala.

Googe, James T., S.B. (*Georgia Robertson Christian Coll.*) 1906, M.D. (*Univ. of Tennessee*) 1911, Meridian, Miss.

Lung, Yu-Ying, M.D. (*Hunan Yale Medical School*) 1923, Nanking, China

Nozi, Yuzuru, M.D. (*Tokyo Imperial Univ.*) 1927, Hiroshima, Japan

Shelamer, Arthur McK., S.B. (*Clemson A. & M. Coll.*) 1923, M.D. (*South Carolina Medical Coll.*) 1928, Union Springs, Ala.

Wails, James Otto, M.D. (*Tulane Univ.*) 1912, Ayer, Mass.

Watson, Luke M., M.B.CH.B. (*Aberdeen Univ.*) 1929, St. Ann's Bay, Jamaica

TABULAR VIEW

	OCTOBER	NOVEMBER	DECEMBER	JANUARY
MONDAY	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.
TUESDAY	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M.	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Immunology 2–3 P.M.	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Immunology 2–3 P.M.	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Immunology 2–3 P.M.
WEDNESDAY	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15–11.15 A.M. Epidemiology A 11.30 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.
THURSDAY	Field Work in Public Health Administration Child Health and Epidemiology	(Mornings Only) Field Work in Public Health Administration Child Health and Epidemiology Immunology 2.30–3.30 P.M.	(Mornings Only) Field Work in Public Health Administration Child Health and Epidemiology Immunology 2.30–3.30 P.M.	Field Work in Public Health Administration Child Health and Epidemiology
FRIDAY	Child Health A 9–10 A.M. Public Health Administration A 10.15 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.	Child Health A 9–10 A.M. Public Health Administration A 10.15 A.M.–12.30 P.M. Bacteriology A 2–5 P.M.
SATURDAY	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M.	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M.	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M	Vital Statistics A1 Lecture 9–10 A.M. Laboratory 10.15–11.15 A.M.

	FEBRUARY	MARCH	APRIL	MAY
MONDAY	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Applied Immunology 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Nutrition A—Lecture 2–3 P.M. Nutrition A—Laboratory 3–5 P.M. Graphic Methods 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Nutrition A—Lecture 2–3 P.M. Nutrition A—Laboratory 3–5 P.M. Graphic Methods 2-5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M.
TUESDAY	Hygiene of Ventilation and Illumination A 9–11 A.M. Communicable Diseases A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Parasitology A 2–5 P.M.	Hygiene of Ventilation and Illumination A 9–11 A.M. Communicable Diseases B 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Parasitology A 2–5 P.M.	Hygiene of Ventilation and Illumination A 9–11 A.M. Communicable Diseases B 9–11 A.M. Mental Hygiene A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Ecology A 2–5 P.M.	Mental Hygiene A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Ecology A 2–5 P.M.
WEDNESDAY	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Applied Immunology 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Nutrition A—Lecture 2–3 P.M. Nutrition A—Laboratory 3–5 P.M. Graphic Methods 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Nutrition A—Lecture 2–3 P.M. Nutrition A—Laboratory 3–5 P.M. Graphic Methods 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M.
THURSDAY	Hygiene of Ventilation and Illumination A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Parasitology A 2–5 P.M.	Hygiene of Ventilation and Illumination A 9–11 A.M. Communicable Diseases B 9—11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Parasitology A 2–5 P.M.	Hygiene of Ventilation and Illumination A 9–11 A.M. Communicable Diseases B 9–11 A.M. Mental Hygiene A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Ecology A 2–5 P.M.	Mental Hygiene A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M. Ecology A 2–5 P.M.
FRIDAY	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Applied Immunology 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Nutrition A—Lecture 2–3 P.M Nutrition A—Laboratory 3–5 P.M. Graphic Methods 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M. Nutrition A—Lecture 2–3 P.M. Nutrition A—Laboratory 3–5 P.M. Graphic Methods 2–5 P.M.	Sanitation A 9–12 A.M. Medical Zoölogy and Tropical Medicine A 2–5 P.M.
SATURDAY	Communicable Diseases A 9–11 A M. Vital Statistics A2 11.15 A.M.–12.45 P.M.	Communicable Diseases B 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M.	Communicable Diseases B 9–11 A.M. Mental Hygiene A 9–11 A.M. Vital Statistics A2 11.15 A.M. 12.45 P.M.	Mental Hygiene A 9–11 A.M. Vital Statistics A2 11.15 A.M.–12.45 P.M.